From: Dave Russell/ESC/R3/USEPA/US

Sent: 3/15/2012 3:04:03 PM

To: Cynthia Caporale/ESC/R3/USEPA/US@EPA
CC: Robin Costas/ESC/R3/USEPA/US@EPA

Subject: Re: Fw: Verification/Completeness Checks for Dimock (Micro Weeks 3 and 4 Posted Mar 08)

Let me know if you have any questions.

Regarding 031412-25 --- #1:

Don't agree with this statement: "There is no criterion to qualify samples based on field blank or lab blank contamination." This is puzzling because certainly there is a requirement to qualify data based on whether or not the lab followed the method. Running a lab blank with each set of samples is part of the method, therefore the absence of a lab blank would be an acceptable basis for qualifying data. In the validation report the term "method blank" was used for lab blank.

Agree with some but not all of this statement: "Since all data has been qualified unusable (R) based on the absence of both negative and positive controls, no further qualifications are necessary."

I agree that since all the HPC data was qualified unusable, qualifying some or all of it on other bases is unnecessary. The phrase "based on the absence of both negative and positive controls" needs to be corrected. A "negative control" is not the same thing as a "lab blank" (or sterility control). A "negative control" involves inoculation of the medium (agar or broth) with a species that is known not to grow in that medium, and a "lab control" (aka "sterility control" or "method blank") involves adding either nothing or sterile water to the medium in order to assess conditions and analyst technique during performance of the method at the bench--- to determine whether they could have contaminated test samples during analysis. Thus, it is not correct to use "negative control" to refer to a lab blank.

Furthermore, the Microbiology Data Validation Report for Week 3 indicates that the qualification of HPC data as unusable was based only on the absence of a lab blank (=sterility blank or method blank). The HPC data was not qualified as unusable on the basis of the missing positive control. Why? Because the absence of a positive control for HPC is much less serious compared to the absence of a sterility control (or lab blank). The fact that some sample plates showed CFU growth demonstrates that the agar could support growth, making the absence of a positive control less critical, and therefore, it was not considered a basis for rejecting the data, but just qualifying it as biased low. (A positive control is still important, however, and should have been performed when the agar batch was prepared -- as required by EPA's SDWA Lab Cert Manual.)

The statement above should read: "Since all data has been qualified unusable (R) based on the absence of method blanks, no further qualifications are necessary."

Regarding 031412-25 --- #2:

As explained above "both negative and positive controls" should be changed to "method blanks".

Yes, an updated lab report for HW51 should be requested.

From: Cynthia Caporale/ESC/R3/USEPA/US
To: Dave Russell/ESC/R3/USEPA/US@EPA
Cc: Robin Costas/ESC/R3/USEPA/US@EPA

Date: 03/15/2012 12:11 PM

Subject: Fw: Verification/Completeness Checks for Dimock (Micro Weeks 3 and 4 Posted Mar 08)

Please review the reports below and confirm that you agree with the statements on report verification (especially DSR-031412_25 since there is a request for resubmission of report).

Cynthia Caporale, Chief

DIM0037816 DIM0037816

OASQA Laboratory Branch U.S. EPA Region III **Environmental Science Center** Fort Meade, MD (410) 305-2732

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----- Forwarded by Cynthia Caporale/ESC/R3/USEPA/US on 03/15/2012 12:09 PM -----

From: Ex. 4 - CBI

Cynthia Caporale/ESC/R3/USEPA/US@EPA, Kelley Chase/R3/USEPA/US@EPA To: Cc:

John Gilbert/CI/USEPA/US@EPA, Gary Newhart/CI/USEPA/US@EPA

Ex. 4 - CBI Ex. 4 - CBI

03/15/2012 12:01 PM Date:

Subject: Verification/Completeness Checks for Dimock (Micro Weeks 3 and 4 Posted Mar 08)

.....are attached for your review and consideration.

Ex. 4 - CBI

Lockheed Martin

Scientific, Engineering, Response and Analytical Services (SERAS)

Ex. 4 - CBI

[attachment "SERAS-172-DSR-031412_25.docx" deleted by Dave Russell/ESC/R3/USEPA/US] [attachment "SERAS-172-DSR-031512 26.docx" deleted by Dave Russell/ESC/R3/USEPA/US]

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